



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,599	02/28/2002	Gilles Feugnet	220188US2PCT	3584
22850	7590	01/27/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			JACKSON, CORNELIUS H	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

**Application No.**

10/069,599

**Applicant(s)**

FEUGNET ET AL.

**Examiner**

Cornelius H. Jackson

**Art Unit**

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-30 and 34 is/are allowed.
- 6) ☐ Claim(s) 31,32 and 36-42 is/are rejected.
- 7) ☐ Claim(s) 33 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Acknowledgment is made that applicant's Amendment, filed on 28 October 2004, has been entered. Claim 27 was amended. Claims 16-42 are pending in the current application.

### ***Allowable Subject Matter***

2. Claims 16-30, 33-35 and 34 are allowed.
3. Claims 33 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The indicated allowability of claims 31, 32 and 36-42 is withdrawn in view of the newly discovered reference(s) to Peressini (6418156). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2828

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 31, 32 and 36-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Peressini (6418156). Peressini discloses a pumped laser comprising: an active lasing medium **700** arranged in an optical cavity **see col. 20, line 65**; a pumping means **122** emitting a pumping beam toward the active lasing medium **700**; means for coupling **124** the pumping beam with the active lasing medium **700**; and one or more non-homogeneously doped zones formed in the active lasing medium and surrounded by a non-doped region forming a remainder of the active lasing medium and that has practically no dopant or no dopant at all, **see col. 21, lines 23- 46**.

Regarding claim 32, Peressini discloses wherein the one or more doped zones is a doped zone positioned substantially centrally in the active lasing medium, **see col. 21, lines 35-38**.

Regarding claim 36, Peressini discloses wherein the one or more doped zones has a parallelepiped or circular or elliptical shape, **see col. 21, lines 35-38**.

Regarding claim 37, Peressini discloses wherein the pumping means comprises one or more diode arrays, **see col. 7, lines 50-55** and the coupling means includes a light concentrator for receiving all light emitted by the diode arrays, **see col. 8, lines 36-49**.

Regarding claim 38, Peressini discloses wherein the coupling means comprises at least one of the devices chosen from the group consisting of: a refractive focusing system, a diffractive focusing system, a system working by reflection, and a system for reshaping an extent of a beam, **see col. 8, line 50- col. 9, line 6.**

Regarding claim 39, Peressini discloses wherein a distribution of the dopants in the doped zones of the active lasing medium is made according to a gradient, **see col. 21, lines 32-38.**

Regarding claim 40, Peressini disclose wherein the doped zones dopants are chosen from among one or more of the ions of the group consisting of:  $\text{Nd}^{3+}$ ,  $\text{Yb}^{3+}$ ,  $\text{Er}^{3+}$ ,  $\text{Ho}^{3+}$  and  $\text{Th}^{3+}$ , **see col. 6, lines 45-53 and col. 21, lines 41.**

Regarding claim 41, Peressini disclose wherein a face of the active lasing medium facing the coupling means is treated to be anti-reflective at a pumping wavelength and reflective at a laser wavelength **see col. 8, lines 47-49**, and an opposite face of the active medium is treated to be anti-reflective at the laser wavelength, **see col. 9, lines 7-22 and col. 20, lines 21-24.**

Regarding claim 42, Peressini discloses the laser amplify one or more laser beams, **see col. 7, lines 50-55, col. 8, lines 36-49 and col. 20, line 41-col. 21, line 46.**

Art Unit: 2828

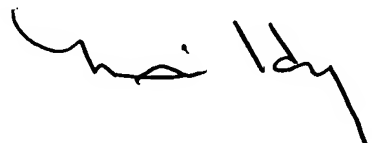
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (571)272-1942. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHJ  
chj

  
MIN SUN OH HARVEY  
PRIMARY EXAMINER